

September 6, 1955

To: Mr. A. H. Williams

From: Karl R. Bopp

Re: Some comments generated by the discussion concerning the discount rate at the meeting of the Board of Directors on September 1, 1955.

MONEY MARKET IMPLICATIONS OF NEGATIVE FREE RESERVES

I. The discount rate, market rates, free reserves and member bank borrowing

Since free reserves are defined as excess reserves minus member bank borrowings from the Federal Reserve Banks, they can be negative only if borrowings exceed excess reserves. Furthermore, since excess reserves rarely fall below  $\$ \frac{1}{2}$  billion, free reserves do not reach a negative level until borrowing exceeds that figure. In other words, negative free reserves mean that the money market is dependent directly on the Reserve Banks to a considerable degree.

Attempts of member banks to reduce this dependence, either because of tradition possibly reënforced by moral suasion or because it is made more expensive, will tend to tighten the money market in terms of both availability and cost of credit.

But these attempts to reduce dependence will be frustrated if a specified level of negative free reserves continues to be the goal. A primary effect will be a further rise in market rates. If the discount rate is to continue to be a penalty rate or to lead the market, it will have to be increased again.

We may begin with member bank borrowing of, say, \$700-800 million and negative free reserves of \$100-200 million. The discount rate is raised to lead the market - or to make it a penalty rate. But this penalty rate will not reduce borrowing so long as open market

operations are designed to maintain negative free reserves at the original level. Market rates, however, may be expected to rise because credit has become more expensive at one of its important sources (Federal Reserve Bank discount windows). If the new discount rate is to be kept above market rates, it will have to be increased again.

The point is that the periodic upward adjustments of rates could be very rapid. Too rapid an upward adjustment could create a liquidity crisis.

An ultimate purpose of tightening the market is, of course, to curb demand, but the question of policy is the speed with which the brakes should be applied. Although the central bank operates in the money market, its ultimate purpose is to influence the flow of purchases throughout the economy. If the existing tone of the money market is judged to be appropriate to the state of the economy, the discount rate should not be changed for the purpose of assuring that it will continue to "lead" rather than to "follow" market rates.

## II. Anticipations and the rate structure

Although many factors influence the time structure of interest rates, a pervasive influence is the market's expectations as to rates in the future. If the market expects rates to rise, the slope will tend to be positive (rates on short maturities will be lower than those on longer maturities). The basic reason is that borrowers will wish to issue long terms before the expected rise takes place, and the lenders will hesitate to invest in long issues until after the expected rise has taken place. In other words, the expectation tends to increase the demand for and to reduce the supply of long-term funds. At the same time, lenders, not wishing to keep funds idle, will tend to invest in short terms, whereas

borrowers will borrow on short term only if they secure a rate concession. The expectation of a rise tends to increase the supply of and reduce the demand for short-term funds.

If the market expects rates to rise, it may be difficult to force up short-term rates without "drying up" the long-term capital market to a greater extent than may appear desirable.